(PLR) was ≥220 and aspartate-aminotransferase-lymphocyte ratio (ALRI) ratio ≥65 for a maximum score of 3.

**Results:** The cohort consisted of 21 (50%) women and 21 men (50%) with an average age of 58.5 ± 13.4 years. The average pretreatment values were NLR (5.1 ± 3.9), PLR (220.2 ± 142.2), and ALRI (65.2 ± 68.9). OS differed by score (CS 0 (0.99 ± 1.18 years), CS 1 (1.57 ± 1.25 years), CS 2 (0.65 ± 0.05 years) and CS 3 (0.62 ± 0.53 years)). The OS in those with a CS of 0 or 1 (1.33 ± 1.26 years) was significantly longer than those with a CS >1 (0.63 ± 0.44 years) (P = 0.04). When looking at ORR there was no statistically significant difference between those with a composite score of 0 or 1 (9/14, 64.3%) and those with a composite score >1 (3/9, 33.3%) (P = 0.14).

**Conclusions:** This novel composite score which utilizes NLR, PLR, and ALRI values may predict OS in patients undergoing radioembolization for mCRC.

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**Scientific Session 7**

**Men’s and Women’s Health I**

Wednesday, March 24, 2021
10:00 AM – 11:00 AM

**Abstract No. 39**

Prostatic artery embolization in patients with recurrent lower urinary tract symptoms following failed transurethral resection of the prostate

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**Purpose:** This study examines the safety and efficacy of prostatic artery embolization (PAE) in treating benign prostatic hyperplasia (BPH) with refractory lower urinary tract symptoms (LUTS) following transurethral resection of the prostate (TURP).

**Materials and Methods:** All PAE cases from April 2015 through September 2020 in a tertiary academic health system were queried (n = 214). For inclusion, patients needed to have undergone elective PAE due to BPH and associated LUTS after previously having at least one TURP (n = 14). Exclusion criteria included: prostate cancer or urgent PAE for hematuria. Demographic, baseline, procedural, adverse event (AE) and follow-up data were collected for patients meeting inclusion criteria. Technical success was defined by stasis in embolized vessels.

**Results:** The patients had a mean age of 71.8 years (SD = 6.8) and mean ellipsoid prostate volume of 126.1 cm³ (range, 54-196 cm³). The median time between the most recent TURP and PAE was 3 years (mean = 7, range 1-20). Seven patients had 1 prior TURP, 5 had 2, and 2 had 3. Mean baseline International Prostate Symptom Score (IPSS) was 18.4 (SD = 10.1) and mean baseline Quality of Life score (QOL) was 4.4 (SD = 1.7).

Procedures had a mean fluoroscopy time of 40.7 minutes, radiation dose of 579973.1 mGy·cm², and contrast volume of 139.3 mL. Technical success rate was 100%. Bilateral and unilateral embolization was achieved in 12 and 2 patients, respectively.

After an average of 69.2 days (SD = 234.2) post-PAE, mean IPSS reduction was 3.8 (n = 10, SD = 4.0, P < 0.001) and mean QOL reduction was 1.9 (n = 9, SD = 1.7, P < 0.001). Post-PAE adverse events included urethral irritation (n = 1), hematospermia (n = 1) pain (n = 1), and incomplete emptying with a need for self-catherization (n = 1). One major adverse event occurred (aortic dissection from catheterization).

**Conclusions:** While further study is required to fully assess efficacy and safety, early results in 14 patients indicate the feasibility of PAE as a valuable treatment option in patients with BPH-associated refractory LUTS following TURP with inadequate symptom resolution.

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**Abstract No. 40**

Does the use of a hybrid 4D angio-CT system significantly impact procedure time for prostate artery embolization?

A. Bibok, B. Kis, N. Parikh; Moffitt Cancer Center

**Purpose:** To evaluate whether the use of a hybrid angio-CT (4DCT) imaging impacts procedure time during prostate artery embolization (PAE)

**Materials and Methods:** This is an institutional review board approved, single-center, retrospective study. Medical charts of 10 consecutive patients who underwent technically successful bilateral PAE in a hybrid angio-CT suite between September 2017 and February 2020 were reviewed. Every patient had intraprocedural selective CT angiography (CTA) of each prostatic artery (PA), resulting in 2 CTA/patient. Procedure time (PT) was measured from the start of the procedural conscious sedation until the patient left the angiography suite. Timestamps of the CTA and DSA/fluoroscopy time of the procedural conscious sedation until the patient left the angiography suite. Timestamps of the CTA and DSA/fluoroscopy (DSAFCs) were extracted from the imaging DICOM data. The time required to obtain an intraprocedural CTA of a PA (CTT) was defined as the time elapsed between the last DSAFC before and the first DSAFC after the CTA acquisition. CTT also included “on-the-go” evaluation of the images by the operators. Short-term clinical success was evaluated by comparing International Prostate Symptom Score (IPSS) and Quality of Life (QOL) scores before treatment and at 6-week follow-up.

**Results:** Mean PT was 147.9 minutes (range 94-225 mins). Mean CTT was 17.1 minutes per procedure (range 7.9-34.3 mins; n = 10) including 2 CTAs/procedure for every patient. CTT was 12.3 ± 5.4% of PT. Three of the 20 PA angiograms revealed intra-prostatic non-target embolization. Acquisition of intraprocedural CTA of bilateral PAs is valuable for staging and treatment planning.

**Conclusions:** Intraprocedural CTA of bilateral PAs is valuable for evaluating International Prostate Symptom Score (IPSS) and Quality of Life (QOL) scores before treatment and at 6-week follow-up. The use of a hybrid 4D angio-CT system significantly impacts procedure time for prostate artery embolization (PAE).